

Docket No.: 13987-00003-US  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Petra Cirpus et al.

Application No.: National Phase of  
PCT/EP2004/011294

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For: TRANS-2-ENOYL-COA REDUCTASE  
GENE OF EUGLA GRACILIS

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

Of the documents listed on the attached SB/08 are the documents cited in the International Search Report during the prosecution of international application no. PCT/EP2004/011294, which corresponds to the above referenced application. In accordance with 37 CFR 1.97(b)(2), Applicants hereby submit these documents for the Examiner's consideration. A copy of each document required under 37 CFR 1.98(a)(2) is enclosed. A copy

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of the International Search Report is attached to the published international application enclosed herewith.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such. Moreover, Applicants understand the Examiner will make an independent evaluation of the cited documents.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Applicants believe no fee is due with this response. However, if a fee is due, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 03-2775, under Order No. 13987-00003-US from which the undersigned is authorized to draw.

Respectfully submitted,

By 

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Attorney for Applicants

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Petra Cirpus
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	13987-00003-US
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U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	BA	WO-03/054189	07-03-2003	Sungene GmbH & Co. KGaA		See CA 2 470 329
	BB	CA-2 470 329-A1	07-03-2003	Sungene GmbH & Co. KGaA		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	Inui, Hiroshi, et al., "Purification and Some Properties of Short Chain-Length Specific <i>trans</i> -2-Enoyl-CoA Reductase in Mitochondria of <i>Euglena gracilis</i> ", J. Biochem 100 (1986), pp. 995-1000.	
	CB	Makino, K., et al., "Hypothetical protein VP1231", Database UniProt, EBI Accession No. Q87QB9, June 1, 2003.	
	CC	Stover, C. K., et al., "Pseudomonas aeruginosa PAO1, section 282 of 529 of the complete genome", Database EMBL, Accession No. AE004721, September 1, 2000.	
	CD	Inui, Hiroshi et al., "Fatty Acid Synthesis in Mitochondria of <i>Euglena gracilis</i> ", Eur. J. Biochem. 142 (1984), pp. 121-126.	
	CE	Ohlrogge, John, et al., "Lipid Biosynthesis", The Plant Cell 7 (1995), pp. 957-970.	
	CF	Topfer, Reinhard, et al., "Modification of Plant Lipid Synthesis", Science 268 (1995), pp. 681-686.	
	CG	Brenner, R. R., "Regulatory Function of Δ6 Desaturase - Key Enzyme of Polyunsaturated Fatty Acid Synthesis", Adv. Exp. Med. Biol. 83 (1976), pp. 85-101.	
	CH	Browse, John et al., "Fluxes Through the Prokaryotic and Eukaryotic Pathways of Lipid Synthesis in the '16:3' Plant <i>Arabidopsis thaliana</i> ", Biochem. J. 235 (1986), pp. 25-31.	
	CI	Voelker, Toni, "Plant Acyl-ACP Thioesterases: Chain-Length Determining Enzymes in Plant Fatty Acid Biosynthesis", Genetic Engineering 18, Ed. J. K. Setlow (1996), pp. 111-113.	
	CJ	Shanklin, John et al., "Desaturation and Related Modifications of Fatty Acids", Annu. Rev. Plant Physiol. Plant Mol. Biol. 49 (1998), pp. 611-641.	
	CK	Frentzen, Margrit, "Acyltransferases from Basic Science to Modified Seed Oils", Fett/Lipid 100 (1998), pp. 161-166.	

Examiner Signature		Date Considered	
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PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

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				Art Unit	N/A
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				Attorney Docket Number	13987-00003-US
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	CL	Millar, Anthony A., et al., "All Fatty Acids are Not Equal: Discrimination in Plant Membrane Lipids", Trends in Plant Science, Vol. 5, No. 3 (2000), pp. 95-101.	
	CM	Cases, Sylvaine, et al., "Identification of a Gene Encoding An Acyl CoA:diacylglycerol Acyltransferase, A Key Enzyme in Triacylglycerol Synthesis", Proc. Natl. Acad. Sci. USA 95 (1998), pp. 13018-13023.	
	CN	Post-Beittenmiller, Dusty, "Biochemistry and Molecular Biology of Wax Production in Plants", Annu. Rev. Plant Physiol. Plant Mol. Biol. 47 (1996), pp. 405-430.	
	CO	Inui, Hiroshi, et al., "Wax Ester Fermentation in <i>Euglena gracilis</i> ", FEBS Letters, Vol. 150, No. 1 (1982), pp. 89-93.	
	CP	Kitaoka, S., et al., "Enzymes and Their Functional Location", D. E. Buetow, Ed., The Biology of Euglena, Vol. 4, Subcellular Biochemistry and Molecular Biology, Academic Press, San Diego, pp. 2-135.	

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<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

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